DOCUMENT RESUME

ED 174 938 CS 004 799

AUTHOR Walmsley, Sean A.
TITLE On the Relationship between Writing and Reading Processes: A Contextual Perspective.
PUB DATE Nov 78
NOTE 17p.; Paper presented at the Annual Meeting of the National Council of Teachers of English (68th, Kansas City, Missouri, November 23-25, 1978)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Cognitive Processes; Communication (Thought Transfer); *Composition (Literary); Educational Research; Linguistics; Readability; *Reading Comprehension; *Reading Processes; *Reading Research; Social Environment; *Writing Skills
IDENTIFIERS *Composition Process

ABSTRACT

The relationship between writing and reading processes can be analyzed from several contextual perspectives. The contextual perspectives may be linguistic, social, schematic, or strategic. While the writer follows several steps in getting meaning into print, the reader may not be able to reverse perfectly these steps and get meaning from print. The reading processes are affected by writing processes to the extent that writers' and readers' contexts are not equivalently transparent or obvious to each other. Writers have some control over the transparency or clarity they provide to readers' contexts if they choose to be sensitive to them; however, readers may have less choice. The research implies that any conception of the reading/writing process will have to be sensitive to the particular processing demands on writers versus readers and to the differences in writers' and readers' purposes for writing and reading. (MKM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

ED174938

ON THE RELATIONSHIP BETWEEN WRITING AND READING PROCESSES: A CONTEXTUAL PERSPECTIVE

Sean A. Walmsley

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

Sean A. Walmsley

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

CS 004 799

Recent surveys of children's writing abilities (Graves, 1978; National Assessment of Educational Progress, 1975) point to deficiencies in the quality of children's written expression, but they also reveal how unequally schools divide their attention between reading and writing. The focus of elementary school literacy instruction is weighted heavily in favor of reading; so, too, is the content of teacher training programs for elementary teachers. Graves (1978) provides evidence of a decline in the time that students spend writing and the amount they actually produce in a given year; he also shows that many teachers of writing either do not practice the writing 'craft' themselves, or were not even trained to teach writing in their preparatory courses (p.15). It would seem that over the past twenty years or so, reading, as opposed to reading and writing, has become the primary focus of elementary schools.

A similar differentiation appears to dominate the research literature - reading research and writing research rarely impinge on one another's territory. One reason for this is that most of the research on writing has been focused on the composition ability of college students, while reading researchers have been predominantly interested in the reading processes of elementary and secondary students. Another is that while reading research has shifted its focus from investigations of reading curricula towards experimental research on the process of reading (Gibson & Levin, 1975), writing research is still mainly focused on pedagogy rather than process, and even when concerned with process, its approach is typically intuitive and introspective (Cooper and Odell, 1976; Graves, 1975; Kinneavy, 1973, Mellon, 1977). Both approaches have their usefulness - experimental paradigms have tight control over variables and are easy to replicate; intuitive approaches are situational

and probably more insightful - but their differences are reconciled only with considerable effort.

Some connections between reading and writing have been made. Evanechko, Ollila, and Armstrong (1974) have investigated the relationship between reading and writing outcomes, as measured by reading achievement tests and measures of written syntactic complexity. They found reading and writing to be significantly correlated for a sample of sixth graders; although it is difficult to relate these results to an understanding of how reading and writing processes are related. Others (e.g. Stotsky, 1975) have examined the effects of sentence-combining exercises on reading comprehension, or the role of language-experience story-writing on the development of reading skills (Allen, 1976). Page (1974), however, presents a quite explicit description of the relationship between writing and reading processes. Based on the premise that the purpose of writing is getting meaning into print,, and the purpose of reading is to get meaning from print (p. 172), Page's description involves five steps for the writer to proceed from meaning to print, and another five for the reader to get meaning from the print: The writer draws from his fund of knowledge (1), specific concepts (2), representing the meaning; some of these, the deep structures (3), are selected for being encoded; next the author conceives surface structures (4) to represent the deep structures; finally, via orthographic rules, the conceived structures are transformed into graphic surface structures (5). The reader then takes over, reversing the process, proceeding from graphic surface structure to knowledge, via the perceived surface structure, the deep structure and meaning.

Finally, some recent connections between reading and writing have been made by researchers viewing the relationship either from a reader's

perspective (Slatoff, 1970; Smith, 1975) or from a writers's perspective (deHirsch, 1977; Britton, 1975). What is suggested by this research is that reading and writing involve some quite similar and some quite dissimilar processes, but the interrelatedness of the two sets of processes cannot be explained in simple terms.

Firstly, the view of reading proposed by Page (1974) is but one conception of the processes involved in reading, namely a 'bottom-up' approach (e.g. LaBerge & Samuels, 1974) that begins with the analysis of letters and culminates with the understanding of the author's message. Other views of the reading process have supported alternate conceptions that either start with the reader's 'knowledge' and sample the text to confirm or deny the reader's expectations - a so-called 'top-down' approach (e.g. Smith, 1971), or combine the reader's 'given' knowledge with what the writer has written ('new' knowledge) in an 'interactive' approach (Haviland & Clark, 1974). Siminlarly, one might conceive of writing in terms of 'bottom-up', 'top-down' or 'interactive' processing. Writing rarely occurs in a vacuum; it typically is done in response to a stimulus, internally or externally provided. A 'bottom-up' approach to writing would involve an attempt to reproduce, as faithfully as possible, the properties of the stimulus, such that the meaning of the writing resided completely within the text. A 'top-down' approach to writing would involve the writer's attempt to represent his own perspective of the stimulus, such that the meaning of the writing resides primarily outside the text. In an interactive process, the text would attempt to represent the interactions of stimulus properties and the writer's perspective.

Secondly, Smith (1972, 1975) has pointed out that one of the major differences between reading and writing is that while the reader need not make use of all the graphic structures (defining reading, of course, in a top-down approach), the writer has no choice but to represent all the structures. In this sense, the two processes are remarkably dissimilar. However, if reading is defined as a 'bottom-up' process, the reader and writer should theoretically have equally difficult tasks, since the reader must process everything that the writer has written. But this overlooks the basic fact that recognizing letters, words, sentences and paragraphs is much easier than producing them. For one reason, there is greater variability of phoneme-grapheme than grapheme-phoneme correspondence; for another the production of syntactically acceptable structures beyond the word level (e.g. phrases, sentences, paragraphs) is much easier than reading them (Smith, 1975).

Thirdly, the writer's purpose for writing and the reader's purpose for reading do not necessarily have to be congruent, nor do they necessarily have to involve communication. Although the majority of pieces of writing are intended by their authors to convey meaning of some kind (informative or conative), not all have this 'transactional' function (Britton, Burgess, McLeod & Rosen, 1975). Some authors write 'expressively' (i.e. to reveal something of themselves either to themselves or to a very limited known audience) or 'poetically' (i.e. to use writing itself as an art medium). Slatoff (1970) has argued that in some forms of writing, the writer's purpose may be to communicate something to a reader, but he does so implicitly rather than explicitly, forcing the reader to bring more of his

knowledge to the text in order to compensate for what the writer has left out. The point here is that writers may choose to embody their meaning explicitly in the text (as in the case of an insurance contract) or embody it implicitly (as in a poem, perhaps) - Olson's (1977) distinction between 'text' and 'utterance'. It is all a question of where the writer determines that meaning should reside - in the reader's mind, or in the written text.

Fourthly, writers may or may not have the reader in mind when they write. This may depend on whether the written discourse is transactional or not, and if so, what it is intending to convey to whom. DeHirsch (1977) defines good writing in terms of how easy the reader will find the writing to read - "writing is better if it communicates the same meaning but makes less demands on the reader " (p. 9). The problem for the writer is, of course, knowing what makes less demands on the reader: but the point here is that the writing process itself may be structurally affected by considerations given by the writer to the demands made on those who read it. In this sense, the acts of writing and reading are not completely separable as implied by Page's (1974) model, except in cases where writers are oblivious to their readers. Further, one might argue that writing makes no demands on readers (either semantically or syntactically) reduces reading to the level of passive input of 'given' information, which to some is not reading at all (Adler, 1940).

Finally, as Emig (1977) has argued, writing is a mode of learning in a way that reading is only partially so. Emig points out that writing is originating and creating a unique verbal construct, whereas reading is

creating or recreating but not originating a verbal construct (p. 123). In originating verbal constructs, the writer has to grapple with conceptual relationships, with the formulation and reformulation of hypotheses, with analysis and synthesis. Her point is that only writing and talking involve origination, and of these two, writing is clearly superior as a facilitator of learning. Although she does not argue it, writing is probably a better facilitator or learning than reading, for very much the same reason - namely, it forces the student to produce rather than merely recognize conceptual relationships, hypotheses, analyses, and syntheses. Often, of course, writing about a topic necessitates having read about it first; but in any event, writing forces the student to make explicit what may need only be partially thought out when read or spoken about. Having the written product available for review and correction is very important for this explicitness to be developed. When, in experiments, writers do not have the product available (e.g. writing with a ball point pen with no ink in it), semantic and syntactic cohesion go to pieces (Britton, Burgess, Martin, McLeod & Rosen, 1975; Gibson and Levin, 1975). Similar but not quite such dramatic effects will of course be seen in the act of speaking, which has not record for the speaker to review as he speaks; or in reading, if the reader is physically prevented from reviewing what has already been read. What makes writing achieve what talking or reading cannot is its demand on the writer to convey his 'message' within conventions of semantic and syntactic structures, some of which are restricted to written discourse either by definition (e.g. punctuation, paragraph identation) or by usage (complex-compound sentences for example; Loban, 1976), and many of which are too complicated to produce without

working on them with a draft in front of one. Talking or reading does not make quite such burdensome demands.

What this research implies is that any conception of the reading/writing process will have to be sensitive to the particular processing demands on writers versus readers; and to differences in writers' and readers' purposes for writing and reading.

A "multi-context" perspective on reading and writing

It would appear from the above discussion that although the writer's function ends where the reader's begins, namely the written text (be it a poem, a warning label on a medicine bottle, a thank-you letter to an aunt, a dissertation thesis or whatever), both the writer and reader are involved, although not necessarily directly, in the entire process from the author's original conception of the text to the reader's final 'understanding' of it. We may think of this involvement in terms of the several 'contexts' in which the acts of writing and reading take place; contexts that may affect the writer and reader quite differently. Mosenthal, Walmsley and Allington (1978) have described four such contexts for reading that apply equally to writing; they are: (1) linguistic; (2) social; (3) schematic; and (4) strategic.

Linguistic context. This context refers to the particular linguistic level at which writing or reading is taking place; words or constituent components of words (orthographic, phonetic, syllabic, or morphemic components), phrases, sentences, paragraphs and 'text' (in the sense of complete written discourses beyond the level of paragraphs - e.g. a poem, short story, novel, etc.). One may further distinguish between primarily semantic and primarily syntactic aspects of each of the levels. A writer, at any one moment of the

writing process, may be concerned with the semantic or syntactic aspect of any linguistic level, or with relationships between levels (e.g. choosing the right word not only for a particular phrase, but also to contribute to the semantic or syntactic structure of the 'text'). A reader, similarly, may process text at any of the linguistic levels at any given moment of reading. The only difference between writing and reading processes with respect to the linguistic level is that writers, unlike readers, must eventually be concerned with the constitutent components of words, since they have to write each and every word, and moreover spell them according to the principles of the alphabetic orthography. Readers do not have to be quite so specific, unless their task is proof reading.

Social context. This context is defined as the environment in which the writing or reading act takes place and includes such parameters as the place and time of writing/reading, the person or persons with whom the writer or reader is interacting, and the task demands as defined by the context and/or the person for whom the writing or reading is performed. In most cases, the social context of writing is different from that of reading, since typical acts of reading involve texts that have been written elsewhere. However, in two cases at least, readers and writers share a social context - one is where the writer is writing under similar conditions as those in which the reader reads (e.g. writing one in class, for being read by the class); the other is where the writer and the reader are one and the same person (e.g. reading what has been written in order to revise it). One would expect that with the two exceptions noted above, social context parameters affect writers and readers quite differently during the respective acts of writing and reading.

Schematic context. The schematic context refers to the writer's or reader's knowledge of the world (Anderson, 1977); specifically, it refers to that part of a person's knowledge that is available to be brought to bear on a specific writing or reading task. One may think of this knowledge as consisting of both semantic and syntactic 'schemata'; in other words, the accumulation of a person's experience relative to the content and form of both writing and reading. These 'schemata' involve knowledge of the content of what is to be written or read -- in other words, experience with the topic; they also may be thought of as involving knowledge of the structure of writing -- in other words, familiarity with particular syntactic structures (e.g. verbs, nouns, dependent and independent clauses, the 'grammar' of a story, and so on); or they may involve both of these at the same time. Unless the writer is also the reader, one must expect that in any given encounter between writer and reader, each has quite different 'schemata' to bring to the respective acts of writing and reading. Further, these schemata may change during the act of writing in very much the same way as they do while reading, as more information is processed relative either to conveying a message or interpreting one.

Strategic context. The strategic context is defined in terms of a writer's or reader's objectives, and the knowledge of the means by which they are achieved. For writers, the strategic context includes the function categories described earlier (e.g. transactional, expressive, poetic), and the 'sense of audience' (e.g. for whom is the written discourse primarily targeted). For readers, objectives are more appropriately defined in terms of function categories such as 'referential'. 'logical', or 'pragmatic' Mosenthal & Walmsley , 1978) -- in other words, to read primarily in

order to reproduce the author's literal meaning, or to construct inferences logically derived from the text, or to use the text as a stimulus for one's own construction. Implicit in the strategic context is the knowledge required to achieve any of these aims.

Transparency and opacity within contexts

A further dimension of each of the contexts is their 'transparency' or 'opacity' (Mosenthal, Walmsley and Allington, 1978). Transparency of a context refers to the case with which a writer or reader recognizes or uses any of the parameters associated with it that are found difficult to recognize or use by the writer or reader. Within a given context, particular parameters may be transparent, others opaque. For example, in the linguistic context, the word 'received' may be semantically transparent to a writer, but orthographically opaque (i.e. he has difficulty spelling it); a word such as 'dun' may be orthographically transparent but semantically opaque (i.e. he may be able to write it but does not know what it means, or uses it inappropriately in a phrase, sentence or paragraph.). The social context may be transparent when the writer or reader performs familiar tasks in a familiar setting; opaque when asked to write or read in unfamiliar setting (e.g. a clinic, examination hall) for unfamiliar persons (i.e. reading diagnostician, examiner). Similarly, the schematic and strategic contexts may have transparent or opaque parameters that facilitate the writer's or reader's task. A writer or a reader for example, may or may not have a schema for 'haikus': the former will be at some disadvantage when asked to write one, the latter when asked to read one. Similarly, the strategic context will be transparent when the writer has a clear idea of the task's objectives and the audience for whom he writes, and has the appropriate strategies for achieving his objective.

It should be noted, however, that a context which is transparent for a writer does not necessarily mean that it is equally so for the reader. Witness the case where a writer's schematic context is transparent for him (i.e. he has the appropriate world knowledge to bring to bear) but opaque for the reader (i.e. he has no equivalent schema); the reader will have some difficulty relating to the text. Similarly, when the reader's schematic context is transparent, but the writer's is opaque, the reader will most likely find the text easy, not only to read but perhaps to reject as being too simplistic. This inequality of transparency for contexts is a common phenomenon between writing and reading.

A second factor is that neither reading no writing takes place within a single context but rather within an interaction of all four contexts, with the prominence of a particular context being determined primarily by its transparency or opacity to the reader or writer. Further, since reading or writing are both multi-episode phenomena (i.e. they contain many individual units of processing, some sequential, many recursive), one should expect that the transparency or opacity of contextual parameters shift as processing continues. In fact, one of the more important tenets of writing as a mode of learning (Emig, 1977) is that the act of composing originates verbal constructs, by (amongst other things) formulating and reformulating hypotheses. From a multi-context perspective, this formulation and reformulation may be seen as a constant shifting in context (particularly schematic, strategic and linguistic).

Thirdly, a reader's or writer's ability to make use of the transparency of a given context may be dependent on some factors external to the actual

processing - for example, his age, intellectual 'stage' of development, socioeconomic status, and so on. Very young children, for example, do not possess 'story' schema of the range and subtlety as adults largely because their experience of the world is limited: hence, they may be less able to make use of or even recognize the transparency of the schematic context.

Implications of the multi-context perspective.

The perspective described above has important implications for conceptualizing the interrelatedness of reading and writing processes. Although one may define the two processes as separate but inversely identical (e.g. Page, 1974), such a conception does injustice to the variety of parameters under both the writer's and reader's control, and to those that are beyond their control. Writers may or may have explicit purposes for their written discourse, and readers may or may not wish to tailor their reading to those purposes. These are parameters primarily within the strategic context, but they also effect and in turn are affected by the schematic and linguistic contexts, in the sense that both writers' and readers' knowledge of the world, and their use of particular linguistic levels are a function of and yet also contribute to the purposes for writing and reading. Where a writer's contexts are transparent, but a reader's are opaque, the reader may have no choice but to not understand what the writer has written. While this may be a function of the reader's age, or intelligence (i.e. one of the developmental factors referred to above) relative to the complexity of the writing, and something which the writer may be unaware of, it may also be a result of the writer's deliberate construction of 'opaque' contexts (for the reader), ones which only readers with sufficient ability of knowledge are able to make 'transparent'. Slatoff (1970) refers

to the habit that novelists sometimes have of deliberately withholding explicit descriptive information about characters, motivated presumably not by literary sloppiness, but more likely by a desire to force the reader to fill in the details with his own conception of the character. Writers of technical articles in professional journals typically assume that their readers have sufficiently well developed 'schemata' for the content and form of what they write; no allowances are made for readers who have poorly developed schemata relative to these articles. The point here is that reading processes are affected by writing processes to the extent that writers' and readers' contexts are not equivalently transparent. Writers have some control over the transparency of readers' contexts if they choose to be sensitive to them; however, readers may have less choice unless they are also the writer, or unless they read in close proximity to the writer. In sum, the implication of the multicontext perspective is that the context in which reading and writing take place serve not only to define what is meant by reading or writing processes, but also what constitutes the interrelatedness of the two processes. It is clear that conceptions of this process will have to be considerably more complex than those presented to date.

References

Adler, M. How to read a book: the art of getting a liberal education. New York: Simon & Schuster, 1940.

Allen, R.V. Language experiences in communication. Boston: Houghton Mifflin, 1976.

Anderson, R.C. The notion of schemata and the educational enterprise. In, R.C. Anderson, R.J. Spiro & W.E. Montague (Eds). Schooling and the acquisition of knowledge. Hillsdale, N.J.: Erlbaum, 1977.

Britton, J., Burgess, T., Martin, N., McLeod, A. & Rosen, H. The development of writing abilities (11-18). London: Macmillan, 1975.

Cooper, C. & Odell, L. Consideration of sound in the composing process of published writers. Research in the Teaching of English, 1976, 10(2), 103-115.

deHirsch, E.D., Jr. The philosophy of composition. Chicago: University of Chicago Press, 1977.

Emig, J. Writing as a mode of learning. College Composition and Communication, 1977, 28, 122-128.

Evanechko, P., Ollila, L. & Armstrong, R. An investigation of the relationships between children's performance in written language and their reading ability. Research in the Teaching of English, 1974, 8(3), 315-326.

Gibson, E. & Levin, H. The psychology of reading. Cambridge, Mass: MIT Press, 1975.

Graves, D. An examination of the writing processes of 7 year-old children. Research in the Teaching of English, 1975, 9(3), 227-241.

Graves, D. Balance the basics: let them write. New York: Ford Foundation, 1978.

Haviland, S.E. & Clark, H.H. What's new? Acquiring new information as a process in comprehension. Journal of Verbal Learning and Verbal Behavior, 1974, 13, 512-521.

Kinneavy, J.L. Theories of composition and actual writing. Kansas English Journal, 1973, 59, 3-17.

LaBerge, D. & Samuels, S.J. Toward a theory of automatic information processing in reading. Cognitive Psychology, 1974, 6, 293-323.

Loban, W. Language development: K-12. Urbana, Illinois: NCJE, 1976.

Mellon, J.C. A taxonomy of compositional competencies. Paper presented to the Minnesota Perpsetcives on Literacy Conference, Minneapolis, June 1977.

Mosenthal, P., Walmsley, S. & Allington, R.L. Word recognition reconsidered: toward a multi-context model. Visible Language, in press (1978).

Mosenthal, P. & Walmsley, S. The quality of children's written discourse as a function of picture familiarity. Paper presented at the 9th Annual Meeting of the Northeastern Educational Research Association, Ellenville, New York, October 1978.

National Assessment of Educational Progress. Writing Mechanics: 1969-1974. Writing Report #05-W-01. Denver, Colorado: National Assessment of Educational Progress, 1975.

Olson, D.R. From utterance to text: the bias of language in speech and writing. Harvard Educational Review, 1977, 47(3), 257-281.

Page, W.D. The author and the reader in writing and reading. Research in the Teaching of English, 1974, 8(2), 170-183.

Slatoff, W.J. With respect to readers: dimensions of literary response. Ithaca, New York: Cornell University Press, 1970.

Smith, F. Understanding reading: a psycholinguistic analysis of reading and learning to read. New York: Holt, 1971.

Smith, F. Phonology and orthography: reading and writing. Elementary English, 1972, 49, 1075-1088.

Smith, F. Comprehension and learning: a conceptual framework for teachers. New York: Holt, 1975.

Stotsky, S.L. Sentence-combining as a curricular activity and its effect on written language development and reading comprehension. Research in the Teaching of English, 1975, 9, 30-70.